In the Claims:

1.   (currently amended) A method of detecting still pixels in a video stream having a plurality of fields including an early field having an early current pixel and a late field having a late current pixel, the method comprising:

defining a first window of pixels of the late ~~field,~~ field with a noise reduction unit, wherein the first window includes the late current pixel;

performing a first window still pixel test <u>with the noise reduction unit</u> using the pixels of the first window; by

calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences; and

comparing an absolute value of each pixel pair difference with a difference threshold, wherein the late current pixel fails the first window still pixel test when the absolute value of any pixel pair difference of the first window is greater than the difference threshold;

defining a second window of pixels of the late ~~field,~~ field with the noise reduction unit, wherein the second window includes the late current pixel; and

performing a second window still pixel test <u>with the noise reduction unit</u> using the pixels of the second window.

2.   (original) The method of Claim 1, wherein the late current pixel is a still pixel when the late current pixel passes the first window still pixel test or the second window still pixel test.

3.   (original) The method of Claim 1, wherein the pixels of the first window are all from a single scan line of the late field.

4.   (original) The method of Claim 3, wherein the pixels of the first window are sequential pixels on the single scan line.

5.   (original) The method of Claim 4, wherein the late current pixel comes before the other pixels of the first window.

6.   (original) The method of Claim 5, wherein the late current pixel comes after the other pixels of the first window.

7.   (cancelled)

8.   (previously presented) The method of Claim 1, wherein performing a first window still pixel test using the pixels of the first window comprises:

summing the absolute value of each pixel pair difference that is greater than a summation threshold to create a correlation sum of the first window;

comparing the correlation sum of the first window with a correlation threshold, wherein the late current pixel passes the first window still pixel test when the correlation sum divided by a size of the first window is less than or equal to the correlation threshold.

9.   (original) The method of Claim 8, further comprising adaptively updating the correlation threshold.

10.   (previously presented) The method of Claim 1, wherein calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises subtracting a luminance value of a pixel in the first window from a luminance value of a corresponding pixel in the early field.

11.   (previously presented) The method of Claim 1, wherein calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises subtracting a chrominance value of a pixel in the first window from a chrominance value of a corresponding pixel in the early field.

12.   (original) The method of Claim 1, wherein performing a second window still pixel test using the pixels of the second window comprises:

calculating a pixel pair difference for each pixel in the second window to generate a plurality of pixel pair differences; and

comparing an absolute value of each pixel pair difference with a difference threshold, wherein the late current pixel fails the second window still pixel test when the absolute value of any pixel pair difference of the second window is greater than the difference threshold.

13.   (original) The method of Claim 12, wherein performing a second window still pixel test using the pixels of the second window comprises:

summing the absolute value of each pixel pair difference that is greater than a summation threshold to create a correlation sum of the second window;

comparing the correlation sum of the second window with a correlation threshold, wherein the late current pixel passes the second window still pixel test when the correlation sum divided by a size of the second window is less than or equal to the correlation threshold.

14.   (original) The method of Claim 13, further comprising adaptively updating the correlation threshold.

15.   (currently amended) A method of detecting still pixels in a video stream having a plurality of fields including an early field having an early current pixel and a late field having a late current pixel, the method comprising:

defining a first window containing a first plurality of pixels of the late ~~field,~~ field with a noise reduction unit, wherein the first plurality of pixels includes the late current pixel;

calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair ~~differences;~~ differences with the noise reduction unit;

summing the absolute value of each pixel pair difference that is greater than a summation threshold to create a correlation sum of the first ~~window;~~ window with the noise reduction unit;

comparing the correlation sum of the first window with a correlation ~~threshold,~~ threshold with the noise reduction unit, wherein the late current pixel is classified as a still pixel when the correlation sum divided by a size of the first window is less than or equal to the correlation threshold.

16.   (original) The method of Claim 15, further comprising adaptively updating the correlation threshold.

17.   (original) The method of Claim 15, further comprising comparing an absolute value of each pixel pair difference with a difference threshold, wherein the late current pixel is classified as a non-still pixel when the absolute value of any pixel pair difference of the first window is greater than the difference threshold.

18.   (original) The method of Claim 15, wherein calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises subtracting a luminance value of a pixel in the first window from a luminance value of a corresponding pixel in the early field.

19.   (original) The method of Claim 15, wherein calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises subtracting a chrominance value of a pixel in the first window from a chrominance value of a corresponding pixel in the early field.

20.   (original) The method of Claim 15, wherein the pixels of the first window are all from a single scan line of the late field.

21.   (original) The method of Claim 20, wherein the pixels of the first window are sequential pixels on the single scan line.

22. (original) The method of Claim 21, wherein the late current pixel comes before the other pixels of the first window.

23. (original) The method of Claim 21, wherein the late current pixel comes after the other pixels of the first window.

24. (currently amended) A method of detecting still pixels in a video stream having a plurality of fields including an early field having an early current pixel and a late field having a late current pixel, the method comprising:

defining a first window containing a first plurality of pixels of the late ~~field,~~ field with a noise reduction unit, wherein the first plurality of pixels includes the late current pixel;

calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair ~~differences;~~ differences with the noise reduction unit;

comparing an absolute value of each pixel pair difference with a difference ~~threshold,~~ threshold with the noise reduction unit, wherein the late current pixel is classified as a non-still pixel when the absolute value of any pixel pair difference of the first window is greater than the difference threshold;

summing the absolute value of each pixel pair difference to create a correlation sum of the first ~~window;~~ window with the noise reduction unit;

comparing the correlation sum of the first window with a correlation ~~threshold,~~ threshold with the noise reduction unit, wherein the late current pixel is classified as a still pixel when the correlation sum divided by a size of the first window is less than or equal to the correlation threshold.

25. (original) The method of Claim 24, further comprising adaptively updating the correlation threshold.

26. (original) The method of Claim 24, wherein calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises subtracting a luminance value of a pixel in the first window from a luminance value of a corresponding pixel in the early field.

27. (original) The method of Claim 24, wherein calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises subtracting a chrominance value of a pixel in the first window from a chrominance value of a corresponding pixel in the early field.

28. (original) The method of Claim 24, wherein the pixels of the first window are all from a single scan line of the late field.

29. (original) The method of Claim 28, wherein the pixels of the first window are sequential pixels on the single scan line.

30. (original) The method of Claim 29, wherein the late current pixel comes before the other pixels of the first window.

31. (original) The method of Claim 29, wherein the late current pixel comes after the other pixels of the first window.

32.   (previously presented) A system of detecting still pixels in a video stream having a plurality of fields including an early field having an early current pixel and a late field having a late current pixel, the system comprising:

means for defining a first window of pixels of the late field, wherein the first window includes the late current pixel;

means for performing a first window still pixel test using the pixels of the first window; wherein the means for performing a first window still pixel test includes

means for calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences; and

means for comparing an absolute value of each pixel pair difference with a difference threshold, wherein the late current pixel fails the first window still pixel test when the absolute value of any pixel pair difference of the first window is greater than the difference threshold;

means for defining a second window of pixels of the late field, wherein the second window includes the late current pixel; and

means for performing a second window still pixel test using the pixels of the second window.

33.   (original) The system of Claim 32, wherein the means for late current pixel is a still pixel when the late current pixel passes the first window still pixel test or the second window still pixel test.

34.   (cancelled)

35.   (previously presented) The system of Claim 32, wherein the means for performing a first window still pixel test using the pixels of the first window comprises:

means for summing the absolute value of each pixel pair difference that is greater than a summation threshold to create a correlation sum of the first window;

means for comparing the correlation sum of the first window with a correlation threshold, wherein the late current pixel passes the first window still pixel test when the correlation sum divided by a size of the first window is less than or equal to the correlation threshold.

36.   (previously presented) The system of Claim 32, further comprising means for adaptively updating the correlation threshold.

37.   (previously presented) The system of Claim 32, wherein means for calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises means for subtracting a luminance value of a pixel in the first window from a luminance value of a corresponding pixel in the early field.

38.   (previously presented) The system of Claim 32, wherein the means for calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises means for subtracting a chrominance value of a pixel in the first window from a chrominance value of a corresponding pixel in the early field.

SILICON VALLEY
'ATENT GROUP LLP

405 Cox Avenue, Ste 22(
Saratoga, CA 95070
(408) 378-7777
FAX (408) 378-7770

39. (original) A system of detecting still pixels in a video stream having a plurality of fields including an early field having an early current pixel and a late field having a late current pixel, the system comprising:

    means for defining a first window containing a first plurality of pixels of the late field, wherein the first plurality of pixels includes the late current pixel;

    means for calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences;

    means for summing the absolute value of each pixel pair difference that is greater than a summation threshold to create a correlation sum of the first window;

    means for comparing the correlation sum of the first window with a correlation threshold, wherein the late current pixel is classified as a still pixel when the correlation sum divided by a size of the first window is less than or equal to the correlation threshold.

40. (original) The system of Claim 39, further comprising means for adaptively updating the correlation threshold.

41. (original) The system of Claim 39, further comprising means for comparing an absolute value of each pixel pair difference with a difference threshold, wherein the late current pixel is classified as a non-still pixel when the absolute value of any pixel pair difference of the first window is greater than the difference threshold;

42. (original) The system of Claim 39, wherein the means for calculating a pixel pair difference for each pixel in the first

window to generate a plurality of pixel pair differences comprises means for subtracting a luminance value of a pixel in the first window from a luminance value of a corresponding pixel in the early field.

43. (original) The system of Claim 39, wherein the means for calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises means for subtracting a chrominance value of a pixel in the first window from a chrominance value of a corresponding pixel in the early field.

44. (original) A system of detecting still pixels in a video stream having a plurality of fields including an early field having an early current pixel and a late field having a late current pixel, the system comprising:

means for defining a first window containing a first plurality of pixels of the late field, wherein the first plurality of pixels includes the late current pixel;

means for calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences;

means for comparing an absolute value of each pixel pair difference with a difference threshold, wherein the current pixel is classified as a non-still pixel when the absolute value of any pixel pair difference of the first window is greater than the difference threshold;

means for summing the absolute value of each pixel pair difference to create a correlation sum of the first window;

means for comparing the correlation sum of the first window with a correlation threshold, wherein the late current

pixel is classified as a still pixel when the correlation sum divided by a size of the first window is less than or equal to the correlation threshold.

45.   (original) The system of Claim 44, further comprising means for adaptively updating the correlation threshold.

46.   (original) The system of Claim 44, wherein the means for calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises means for subtracting a luminance value of a pixel in the first window from a luminance value of a corresponding pixel in the early field.

47.   (original) The system of Claim 44, wherein the means for calculating a pixel pair difference for each pixel in the first window to generate a plurality of pixel pair differences comprises means for subtracting a chrominance value of a pixel in the first window from a chrominance value of a corresponding pixel in the early field.